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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/355,268	04/13/2000	Nicholas Dominic Wells	50060-034	6198

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EXAMINER

OPSASNICK, MICHAEL N

ART UNIT	PAPER NUMBER
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2655

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/355,268

Applicant(s)

WELLS ET AL.

Examiner

Michael N. Opsasnick

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>June 5, 2002</u> <u>7-25-02</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. In view of the appeal brief filed on 3/3/2005, PROSECUTION IS HEREBY REOPENED. The new rejection is set forth below.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8,10-16,18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al (5583962) in view of Keyhl et al (6101475).

As per claims 1,6, Davis et al (5583962) teaches:

“a method of audio signal handling.....audio signal ,
characterized.....comprises:” as decompressed formatted encoded data (fig. 5, col. 8 lines 39-64);

“deriving an auxiliary data signal.....communicating the auxiliary data signal.....re-encoding the decode audio signal.....data signal” as decoding the formatted data, extracting spectral information, calculating a steering quantity and re-encoding the information wrt the steering information (col. 8 line 65 – col. 9 line 60);

Davis et al (5583962) teaches the encoder/decoder steps, however, does not explicitly teach extracting information from the previous decoding step, and incorporating that information into the next encoding step; Keyhl et al (6101475) teaches extracting information during the decoding step to be used into the next encoding step (col. 4 lines 50-60). Therefore, it would have been obvious to one of ordinary skill in the art of audio encoding to enhance the Davis et al (5583962) encoder method to include extracting information from the decoding process to be used in the next encoding process because it would advantageously forward information regarding the previous encoding/decoding results, and therefore improve upon the natural audio degradation that occurs in tandem codec systems (Keyhl et al (6101475), col. 2 lines 47-53).

As per claim 2, the combination of Davis et al (5583962) in view of Keyhl et al (6101475) teaches:

“wherein the auxiliary data signal....audio signal as steering information is associated with multi-channel, multi-band information (Davis et al (5583962), col. 9 lines 30-38)

Art Unit: 2655

As per claim 3, the combination of Davis et al (5583962) in view of Keyhl et al (6101475) teaches:

“wherein the auxiliary data signal....audio signal” as steering info is associated with spectral information (Davis et al (5583962),col. 9 lines 40-46)

As per claim 4, the combination of Davis et al (5583962) in view of Keyhl et al (6101475) teaches:

“wherein the auxiliary data.....audio signal” as deformatter contained sample time information (Davis et al (5583962),col. 32 line 60-65; referring back to the TDAC, col. 8 lines 25-37)

As per claims 5,19 and 20, the combination of Davis et al (5583962) in view of Keyhl et al (6101475) teaches inserting ancillary data into the information stream (Davis et al (5583962),as containing information regarding the sound source itself – col. 31 lines 10-18, col. 32 lines 13-24)

As per claim 7, the combination of Davis et al (5583962) in view of Keyhl et al (6101475) teaches:

“wherein the analysis comprises application of a sub-band filter bank (Davis et al (5583962), subband analysis (col. 6 lines 33-43))

Art Unit: 2655

As per claims 8,15,16 the combination of Davis et al (5583962) in view of Keyhl et al (6101475) teaches:

“wherein the auxiliary data...sub-band....and the method of quantisation within each sub-band.....encoded audio signal frequency” as steering information reflects the result of frequency analysis of the subbands (Davis et al (5583962), Col. 9 lines 1-21; and the subbands using the higher frequency ranges)

As per claim 10, the combination of Davis et al (5583962) in view of Keyhl et al (6101475) teaches frequency analysis information (Davis et al (5583962), frequency subbands -- col. 9 lines 1-21; examiner notes that the claimed features are in the alternate (or) language and therefore when the prior art meets one of the claim limitations, all of the claim limitations are met)

As per claim 11, the combination of Davis et al (5583962) in view of Keyhl et al (6101475) teaches a common signal path for the auxiliary data and the decoded data (Davis et al (5583962), Fig. 8)

As per claims 12,18, the combination of Davis et al (5583962) in view of Keyhl et al (6101475) teaches a data integrity check in the form of a signal notifying the quality of the data (Davis et al (5583962), col. 7 lines 1-16)

Art Unit: 2655

As per claims 13, 14 the combination of Davis et al (5583962) in view of Keyhl et al (6101475) teaches user data bits which can be in lsb format (Davis et al (5583962), col. 16 lines 5-30, referring to Table I)

4. Claims 9 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Davis et al (5583962) in view of Keyhl et al (6101475) in further view of ISO/IEC 11172-3 (1993).

As per claims 9 and 17, Davis et al (5583962) is silent on the use of the encoder/decoder technique with respect to MPEG type data, however, ISO/IEC 11172-3 (1993) teaches subband analysis with header, bit allocation, and scalefactoring manipulations (pp71-73). Therefore, it would have been obvious to one of ordinary skill in the art of encoding/decoding to modify the teachings of Davis to be used for MPEG data because the system as designed by Davis et al works well with psycho-acoustic based data (Davis et al, col. 5 lines 30-62).

Response to Arguments

5. Applicant's arguments filed 3/3/2005 have been fully considered but they are moot in view of the new grounds of rejection.

Conclusion

Art Unit: 2655

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please see related art listed on the PTO-892 form.

7. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872 9314,

(for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Opsasnick, telephone number (571)272-7623, who is available Tuesday-Thursday, 9am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor, Mr. David Ometz, can be reached at (571)272-7593. The facsimile phone number for this group is (571)272-7629.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (571) 272-2600, the 2600 Customer Service telephone number is (571)272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mno
5/11/05



**VIJAY CHAWAN
PRIMARY EXAMINER**